



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/068,779	02/05/2002	Bjorn Landfeldt	106448.00049	7536

27045 7590 07/15/2005

ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR C11
PLANO, TX 75024

EXAMINER

LESNIEWSKI, VICTOR D

ART UNIT	PAPER NUMBER
----------	--------------

2152

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/068,779

Applicant(s)

LANDFELDT ET AL.

Examiner

Victor Lesniewski

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date see action par. 9
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This application has been examined.
2. The preliminary amendment filed 6/17/2003 has been placed of record in the file.
3. Claims 1-23 are pending.

Election/Restrictions

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-23, drawn to changing a format of data transferred between computers, classified in class 709, subclass 246.
 - II. Claims 24-39, drawn to apportioning resources to a proxy server on a network, classified in class 709, subclass 226.
 - III. Claims 40 and 42-55, drawn to determining operating characteristics or conditions of a server on a network, classified in class 709, subclass 224.

5. The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as completing a proxy operation on a data stream. Invention II has separate utility such as apportioning resources to a proxy server. Invention III has separate utility such as network monitoring. See MPEP § 806.05(d).

Art Unit: 2152

6. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Attorney Sidney Weatherford, Reg. No. 45602, on 6/27/2005 a provisional election was made without traverse to prosecute Invention I, claims 1-23. Affirmation of this election must be made by the applicant in replying to this office action. Claims 24-40 and 42-55 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. The applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

9. The IDS filed 5/6/2002, the IDS filed 11/12/2002, the IDS filed 12/10/2002, and the IDS filed 1/2/2003 have been considered.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2152

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-5 and 16-21 are rejected under 35 U.S.C. 102(e) as being anticipated by Mogul (U.S. Patent Number 6,704,798).

12. Some claims will be discussed together. Those claims which are essentially the same except that they set forth the claimed invention as a system are rejected under the same rationale applied to the described claim.

13. Mogul has disclosed:

- <Claim 1>

A method of supporting delivery, from a server to an application, of a data stream associated with a service provided by the server, comprising: selecting the server (figure 5, item 502, where the client issues a request for a server); and automatically and without manual intervention, providing in a communication path that is to be used for said delivery a proxy that performs a proxy operation on the data stream during said delivery, including selecting the proxy on a server side of the communication path (column 8, lines 49-64 and figure 5, item 504, where "proxy" is equated to representation conversion program).

- <Claims 2 and 17>

The method of Claim 1, wherein said step of selecting the server includes requesting the service from an application side of the communication path (figure 5, item 502, where the client issues a request for a server).

- <Claims 3 and 18>

The method of Claim 2, wherein said step of selecting the proxy includes selecting the proxy in response to said requesting step (figure 5, item 504).

- <Claim 4>

The method of Claim 3, wherein said step of selecting the proxy includes selecting the proxy based on information indicative of one of a preference of the application, a characteristic of equipment that will receive the data stream, and a characteristic of the service (column 6, lines 56-64).

- <Claims 5, 19, and 21>

The method of Claim 4, wherein said providing step includes sending from the server side to a proxy execution server a request to install the proxy in the communication path, the proxy execution server installing the proxy thereon in response to said installation request, and coupling the proxy execution server into the communication path (column 8, line 65 through column 9, line 30).

- <Claim 16>

The method of Claim 1, wherein said proxy operation includes one of data compression, data encryption, data transformation, data transcoding and data cacheing (column 2, lines 10-14 and column 8, lines 59-64).

- <Claim 20>

The system of Claim 19, wherein said proxy provider apparatus includes a proxy repository for storing proxies therein, said proxy execution server coupled to said proxy

Art Unit: 2152

repository and operable to download the proxy from said proxy repository (figure 1, item 104).

Since all the limitations of the invention as set forth in claims 1-5 and 16-21 were disclosed by Mogul, claims 1-5 and 16-21 are rejected.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 6, 7, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul, as applied above, in view of Sridhar et al. (U.S. Patent Number 6,266,701), hereinafter referred to as Sridhar.

16. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server. In an analogous art, Sridhar disclosed a proxy application executing on a gateway computer that processes data between a remote host and a client.

17. Concerning claims 6, 7, and 22, Mogul did not discuss the use of input and output ports with his proxy server and therefore did not explicitly disclose allocating input and output ports to be used for coupling the proxy execution server into the communication path and sending to the server side of the communication path information that identifies the input and output ports. However, Sridhar does disclose these features as he goes into detail about the port operation that supports TCP-based data streams in his system. It would have been obvious to one of ordinary

Art Unit: 2152

skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to allocate input and output ports to be used for coupling the proxy execution server into the communication path and send to the server side of the communication path information that identifies the input and output ports as provided by Sridhar. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

18. Thereby, the combination of Mogul and Sridhar discloses:

- <Claims 6 and 22>

The method of Claim 5, wherein said coupling step includes the proxy execution server allocating input and output ports to be used for coupling the proxy execution server into the communication path and sending to the server side of the communication path information that identifies the input and output ports (Sridhar, column 15, lines 14-40 and column 17, lines 20-35).

- <Claim 7>

The method of Claim 6, wherein said input and output port information includes information that identifies one of input and output TCP sockets and input and output UDP sockets (Sridhar, column 15, lines 14-40).

Since the combination of Mogul and Sridhar discloses all of the above limitations, claims 6, 7, and 22 are rejected.

19. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul.

Art Unit: 2152

20. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server. Concerning claim 8, Mogul did not explicitly disclose selecting a plurality of proxies, though this would be a clear extension of his system. Since Mogul utilizes one proxy, it would make sense that his system could be extended to utilize multiple proxies in the same way. Furthermore, Mogul discusses the use of a plurality of parameters in his proxy, which suggests that multiple processes may be applied to a data stream, which is similar to the application of multiple proxies. See Mogul, column 11, lines 47-52. Concerning claim 9, Mogul did not explicitly disclose a plurality of proxy execution servers, though this would be a clear extension of his system. Since Mogul utilizes one proxy execution server, it would make sense that his system could be extended to utilize multiple proxy execution servers in the same way. Thus, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to use a plurality of proxies and a plurality of proxy execution servers.

21. Thereby, Mogul discloses:

- <Claim 8>

The method of Claim 3, wherein said step of selecting the proxy includes selecting a plurality of proxies on the server side of the communication path in response to said requesting step (figure 5, item 504 and obviousness).

- <Claim 9>

The method of Claim 8, wherein said providing step includes sending from the server side of the communication path to a plurality of proxy execution servers a plurality of

Art Unit: 2152

requests to install the plurality of proxies in the communication path (column 8, line 65 through column 9, line 30 and obviousness).

Since Mogul discloses all of the above limitations, claims 8 and 9 are rejected.

22. Claims 11 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul, as applied above, in view of Sridhar.

23. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server or a plurality of proxy servers. In an analogous art, Sridhar disclosed a proxy application executing on a gateway computer that processes data between a remote host and a client.

24. Concerning claims 11 and 23, Mogul did not discuss the use of input and output ports with his proxy server and therefore did not explicitly disclose allocating input and output ports to be used for coupling the proxy execution server into the communication path and sending to the server side of the communication path information that identifies the input and output ports. However, Sridhar does disclose these features as he goes into detail about the port operation that supports TCP-based data streams in his system. It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to allocate input and output ports to be used for coupling the proxy execution server into the communication path and send to the server side of the communication path information that identifies the input and output ports as provided by Sridhar. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

25. Thereby, the combination of Mogul and Sridhar discloses:

- <Claims 11 and 23>

The method of Claim 9, including the proxy execution servers installing the respective proxies thereon in response to the respective installation requests (Mogul, column 8, line 65 through column 9, line 30), and the proxy execution servers sending to the server side of the communication path information that identifies input and output ports to be used for coupling the respective proxy execution servers into the communication path (Sridhar, column 15, lines 14-40 and column 17, lines 20-35).

Since the combination of Mogul and Sridhar discloses all of the above limitations, claims 11 and 23 are rejected.

26. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul, as applied above, in view of Smith et al. (U.S. Patent Number 6,377,991), hereinafter referred to as Smith.

27. Mogul disclosed a method for transcoding information returned by a server to a client at a proxy server or a plurality of proxy servers. In an analogous art, Smith disclosed data retrieval operations between clients and servers that utilize a dynamically changing distributed cache.

28. Concerning claim 10, Mogul did not explicitly disclose sending requests in parallel to the proxy execution servers. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. Since Mogul discloses sending requests to the proxy servers and Smith provides a structure for communication with proxy servers in parallel, it would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system of Mogul by adding the ability to send requests in parallel to the

Art Unit: 2152

proxy execution servers as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

29. Thereby, the combination of Mogul and Smith discloses:

- <Claim 10>

The method of Claim 9, wherein said step of sending requests includes sending the requests in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

Since the combination of Mogul and Smith discloses all of the above limitations, claim 10 is rejected.

30. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mogul in view of Sridhar, as applied above, further in view of Smith.

31. The combination of Mogul and Sridhar disclosed a method for transcoding information returned by a server to a client at a proxy server or a plurality of proxy servers that supports TCP-based port operations. In an analogous art, Smith disclosed data retrieval operations between clients and servers that utilize a dynamically changing distributed cache.

32. Concerning claims 12-15, Mogul did not discuss a parallel structure for a plurality of proxy servers and therefore did not explicitly disclose parallel proxy installations, parallel communications, and forwarding information from the server side to a plurality of proxy servers in parallel. However, Smith discloses a proxy server array where communications with each proxy server can occur in parallel. It would have been obvious to one of ordinary skill in the art

at the time of the applicant's invention to modify the system of Mogul by adding the ability to complete parallel proxy installations and parallel proxy server communications as recited in claims 12-15 as provided by Smith. Here the combination satisfies the need for an information distribution system that is configured to handle a variety of representation conversions. See Mogul, column 3, lines 31-35.

33. Thereby, the combination of Mogul, Sridhar, and Smith discloses:

- <Claim 12>

The method of Claim 11, wherein said installing step includes the proxy execution servers installing the respective proxies in parallel (Mogul, column 8, line 65 through column 9, line 30 and Smith, figure 2).

- <Claim 13>

The method of Claim 11, wherein said step of sending input and output port information includes the proxy execution servers sending their respective input and output port information to the server side in parallel (Sridhar, column 15, lines 14-40 and column 17, lines 20-35 and Smith, figure 2).

- <Claim 14>

The method of Claim 11, wherein said providing step includes forwarding from the server side of the communication path to one of the proxy execution servers the input port information that was sent to the server side by another of the proxy execution servers (Sridhar, column 15, lines 14-40 and column 17, lines 20-35 and Smith, column 19, lines 61-67).

Art Unit: 2152

- <Claim 15>

The method of Claim 14, wherein said forwarding step includes, for each of the proxy execution servers, forwarding from the server side to the proxy execution server the input port information that was sent by another of the proxy execution servers (Sridhar, column 15, lines 14-40 and column 17, lines 20-35 and Smith, column 19, lines 61-67).

Since the combination of Mogul, Sridhar, and Smith discloses all of the above limitations, claims 12-15 are rejected.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- Tso et al. (U.S. Patent Number 6,247,050) disclosed a method for receiving a request from a client for network content, retrieving the content, and transmitting the content to the client with performance improvement information.
- Brandt et al. (U.S. Patent Number 6,377,993) disclosed an integrated proxy interface for web based management reports.
- Cohen et al. (U.S. Patent Number 6,389,462) disclosed a method for transparently redirecting an HTTP connection request that is directed to an origin server to a proxy cache.
- Kukura et al. (U.S. Patent Number 6,633,923) disclosed a method of creating and managing one or more interceptors that can be intrinsically chained.

Art Unit: 2152

35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor Lesniewski whose telephone number is 571-272-3987.

The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Victor Lesniewski
Patent Examiner
Group Art Unit 2152



Dung C. Dinh
Primary Examiner